

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,591,361 B2
APPLICATION NO. : 10/623624
DATED : September 22, 2009
INVENTOR(S) : McGunn et al.

Page 1 of 2

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Please delete the title page and insert the title page attached

Signed and Sealed this

Twenty-second Day of December, 2009

A handwritten signature in black ink, reading "David J. Kappos". The signature is written in a cursive, flowing style with a large initial 'D' and a stylized 'K'.

David J. Kappos
Director of the United States Patent and Trademark Office

(12) **United States Patent**
McGunn et al.

(10) **Patent No.:** **US 7,591,361 B2**
(45) **Date of Patent:** **Sep. 22, 2009**

(54) **HORIZONTAL COIN DISPENSER**

(75) Inventors: **Edward J. McGunn**, Posen, IL (US);
James Ivey, III, Posen, IL (US);
Eduardo DeCastro Barcellos, Posen, IL (US); **Wagner Bittencourt Oliveira**,
Posen, IL (US)

(73) Assignee: **Corporate Safe Specialists, Inc.**, Posen,
IL (US)

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 1136 days.

5,092,816 A * 3/1992 Levasseur 453/17
5,205,436 A * 4/1993 Savage 221/7
5,722,564 A 3/1998 Tiraboschi
5,768,965 A * 6/1998 Gonzalez et al. 83/440
5,830,055 A 11/1998 Jones et al.
6,109,059 A * 8/2000 Lebrun 62/457.5
6,220,463 B1 * 4/2001 Pullen 211/186
6,261,169 B1 * 7/2001 Ishida et al. 453/17
6,269,285 B1 * 7/2001 Mignault 700/236
6,302,294 B1 10/2001 Collier et al.
6,415,953 B1 * 7/2002 O'Brien et al. 221/196

(Continued)

(21) Appl. No.: **10/623,624**

FOREIGN PATENT DOCUMENTS

(22) Filed: **Jul. 21, 2003**

JP 11-250314 * 9/1999

(65) **Prior Publication Data**

US 2005/0016814 A1 Jan. 27, 2005

OTHER PUBLICATIONS

(51) **Int. Cl.**
G07F 9/08 (2006.01)
G06F 7/00 (2006.01)
G06F 9/00 (2006.01)
G06F 19/00 (2006.01)

Merriam-Webster's Collegiate Dictionary, 10th ed., 1998, pp. 352
and 1079.*

Primary Examiner—Jeffrey A Shapiro

(74) Attorney, Agent, or Firm—Wood, Phillips, Katz, Clark &
Mortimer

(52) **U.S. Cl.** **194/216**; 194/217; 453/1;
453/2; 453/16; 453/58; 453/61; 221/196;
221/263

(57) **ABSTRACT**

(58) **Field of Classification Search** 221/266,
221/263, 196, 6; 211/59.3, 59.2; 312/348.3,
312/61, 71; 194/216 224, 244, 246; 453/1,
453/2, 16, 17, 58–62

See application file for complete search history.

A coin dispensing system comprises a drawer including a
bottom wall connected to opposite sidewalls, and a plurality
of spaced dividers between the opposite sidewalls defining a
plurality of columns for supporting vertical tubes of currency.
A plurality of dispensers, one for each column, are provided
each for withdrawing tubes of currency from an associated
column. A plurality of sensors, one for each column, are
provided each for sensing quantity of tubes in the associated
column. A control system is operatively associated with the
sensors for determining quantity of currency in the drawer.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,269,326 A * 5/1981 Delbrouck 221/227
4,367,760 A 1/1983 Thomas et al.
4,469,245 A 9/1984 Fish et al.
4,850,511 A 7/1989 Kral et al.
5,005,339 A 4/1991 Capawana

20 Claims, 7 Drawing Sheets

